IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of: Donald D. Karlov For: SYSTEMS AND METHODS FOR EFFICIENTLY UPDATING COMPLEX GRAPHICS IN A COMPUTER SYSTEM BY BY-PASSING THE GRAPHICAL PROCESSING UNIT AND RENDERING GRAPHICS IN MAIN MEMORY EXPRESS MAIL LABEL NO: EV 316304175 US DATE OF DEPOSIT: JULY 18, 2003 EV316304175US Mail Stop Patent Application Mail Stop Design Mail Stop Sequence Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 Sir: PATENT APPLICATION TRANSMITTAL LETTER Transmitted herewith for filing, please find: \boxtimes A Utility Patent Application under 37 CFR § 1.53(b). A Utility Patent Application under 37 CFR § 1.53(b) as follows: A Continuation of Application No. A Divisional of Application No. A Continuation-in-part of Application No.

A Design Patent Application (submitted in duplicate).



PATENT

The a	bove-id	ntified application includes the following:					
	A Req	est for Nonpublication					
\boxtimes	A Spe	fication including claims and abstract on pages 1 to 16.					
	drawir no nev	of the specification including claims and abstract (pages -) are as and appendixes (if any) of earlier Application No. filed , to which matter has been added. Such earlier application is hereby incorporated into the application by reference.					
		A copy of the executed oath or declaration filed in the earlier application identified above is attached.					
		An Associate Power of Attorney executed by who is listed in the copy the executed Declaration and Power of Attorney filed herewith.					
		A Copy of the Power of Attorney with Revocation filed in prior Application No					
		Signed Statement deleting inventor(s) named in the prior application. Please enter the amendment as follows to the specification under the "Cros Reference to Related Applications" section (or amend the specification to include such a section as the first paragraph):					
		"This application is a continuation/divisional/continuation-in-part [choose one] of , filed , the entirety of which is incorporated herein the reference." [List others in chain as needed]					
		"This application claims benefit of Provisional Application No filed , the entirety of which is incorporated herein by reference."					
	This a filed	plication claims foreign priority under 35 U.S.C. § 119 of Application No. in (Country).					
		A Certified Copy of each of the above applications for which priority is claimed: is enclosed. has been filed in prior Application No. filed .					
\boxtimes	5 Shee	s of Formal Drawings and/or Photographs.					
		Figure 4 should be published.					
		Petition to Accept Color Photographs is enclosed.					

	A Nev	w Unexecuted Declaration or Oath and Power of Attorney.					
\boxtimes	A Nev	v Executed Declaration or Oath and Power of Attorney.					
		An Associate Power of Attorney executed by Declaration and Power of Attorney filed herewith. who is listed in the Executed					
\boxtimes		wly Executed Assignment or Request to Cross-Reference Earlier Recorded nment assigning rights to					
		A Recordation Form Cover Sheet.					
		Recordation Fee - \$40.00.					
	A Pre	liminary Amendment is enclosed.					
	A Seq	uence Listing consisting of pages 1-					
		Diskette containing Sequence Listing is enclosed.					
		The computer readable form in the above-identified application is identical with that filed in Application Number , filed . In accordance with 37 CFR § 1.821(e), please use the sequence listing filed on and received by the PTO on as the computer readable form filed in that application as the computer readable form for the instant application. It is understood that the Patent and Trademark Office will make the necessary change in application number and filing date for the computer readable form that will be used for the instant application.					
		A paper copy of the Sequence Listing:					
		was filed in the above-identified parent application on by the PTO on . and received					
		is included herewith in a separately filed preliminary amendment for incorporation into the specification.					
		A Statement to Support Submission of Sequence Information is enclosed.					
	Information Disclosure Statement including:						
		Form 1449.					
		Copies of References - listed on the attached Form PTO-1449.					
	A cop	y of Petition for Extension of Time as filed in the prior case for copendency.					
	Appen	nded Material as follows:					
\boxtimes	Return	Receipt Postcard (should be specifically itemized)					

FEE	CA	$\Gamma \cap \Gamma$	TT A	TIC	٦XT.
FEE.	L.A	1.4.1	JI.A	111	NA.

Applicant(s) by its/their undersigned attorney, claims small entity status under 37 CFR § 1.27 as:				
	an Independent Inventor			
	a Small Business Concern			
	a Nonprofit Organization			
	el in this application original claims of the prior application before ating the filing fee. (At least one independent claim must be retained for filing ses.)			

			SMALL ENTITY		NOT SMALL ENTITY	
			RATE	FEE	RATE	FEE
DESIGN APPLICATION BASE FEE UTILITY APPLICATION; ALL CLAIMS CALCULATED AFTER ENTRY OF ALL AMENDMENTS			\$165.00		\$330.00	
			\$375.00		\$750.00	\$750.00
	No. Filed	No. Extra				
TOTAL NO. OF CLAIMS	28- 20 =	8	\$9 each		\$18 each	\$144.00
NO. OF INDEPENDENT CLAIMS	4-3=	1	\$42 each		\$84 each	\$84.00
MULTIPLE DEPENDENT CLAIM FEE			\$140		\$280	
ADDITIONAL FILING FEE						
TOTAL FILING FEE DUE						\$978.00

A Check in the amount of \$906.00 is attached. Please charge any deficiency or credit any overpayment to Deposit Account No. 23-3050.

Please charge Deposit Account No. 23-3050 in the amount of \$72.00. This sheet is attached in duplicate.

- The Commissioner is hereby authorized to charge payment of the above fees associated with this communication or credit any overpayment to Deposit Account No. 23-3050. This sheet is attached in duplicate.
 - Any additional filing fees required, including fees for the presentation of extra claims under 37 CFR § 1.16.
 - Any additional patent application processing fees under 37 CFR §§ 1.17 or 1.20(d)
- The Commissioner is hereby requested to grant an extension of time for the appropriate length of time, should one be necessary, in connection with this filing or any future filing submitted to the U.S. Patent and Trademark Office in the above-identified application during the pendency of this application. The Commissioner is further authorized to charge any fees related to any such extension of time to Deposit Account No. 23-3050. This sheet is provided in duplicate.
- Address all correspondence to Customer No. 23377 which is assigned to WOODCOCK WASHBURN LLP, One Liberty Place 46th Floor Philadelphia PA 19103



PATENT TRADEMARK OFFICE

Direct all telephone calls to:

RICHARD W. KNIGHT WOODCOCK WASHBURN LLP One Liberty Place - 46th Floor Philadelphia PA 19103 Telephone No.: (215) 568-3100

Facsimile No.: (215) 568-3439

SHOULD ANY DEFICIENCIES APPEAR with respect to this application, including deficiencies in payment of fees, missing parts of the application or otherwise, the United States Patent and Trademark Office is respectfully requested to promptly notify the undersigned.

Date: July 18, 2003

RICHARD W. KNIGHT

Registration No. 42,751